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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
MISSOULA DIVISION

SAVE OUR CABINETS,
EARTHWORKS, and DEFENDERS OF
WILDLIFE;

Plaintiffs,

v.

UNITED STATES FISH AND
WILDLIFE SERVICE; CHRISTOPHER
S. SAVAGE, Kootenai National Forest
Supervisor; and UNITED STATES
FOREST SERVICE,

Defendants,

and

MONTANORE MINERALS CORP.,

Defendant-Intervenor.

Case No. CV 15-69-M-DWM

**BRIEF IN SUPPORT OF
PLAINTIFFS' MOTION FOR
SUMMARY JUDGMENT**

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INTRODUCTION

This case challenges determinations by the U.S. Fish and Wildlife Service (“FWS”) and U.S. Forest Service that the Montanore Mine—a massive copper and silver mine planned in the Cabinet Mountains of northwest Montana—will comply with legal mandates for protecting imperiled bull trout and grizzly bears under the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531-1544. Plaintiffs Save Our Cabinets, Earthworks, and Defenders of Wildlife challenge FWS’s March 2014 aquatic and terrestrial biological opinions (“BiOps”) for the Montanore Mine, in which the agency determined that developing the decades-long project in the heart of the region’s last, best habitat for bull trout and grizzly bears will not jeopardize either species’ survival or recovery nor destroy or adversely modify critical habitat FWS has designated for bull trout. See FWS-ConsDoc-857-1094 (Aquatic BiOp); FWS-ConsDoc-554-856 (Terrestrial BiOp).¹ Plaintiffs also challenge the Forest Service’s February 2016 record of decision for the Montanore Mine, in which it relied on FWS’s BiOps to determine that authorizing the mine will not violate the ESA. See FS-10579-80.

Today, the Cabinet Mountains provide a rare foothold for bull trout and grizzly bears—species for whom the majority of viable habitat has been lost. This sixty-mile stretch of glaciated peaks and forested valleys includes more than

¹ References to the agencies’ administrative records are indicated by “FWS” or “FS,” as appropriate, followed by the bates-stamped page number.

94,000 acres of federal wilderness largely surrounded by undeveloped national forest lands. Pls.’ Statement of Facts (“SOF”) ¶¶ 1-3. But the Montanore Mine will transform a significant swath of this wild landscape into an industrial site, boring under the Cabinet Mountains Wilderness to extract up to 20,000 tons of ore daily for as long as twenty years. Id. ¶¶ 4-6. In addition to multiple mine adits, the project will require construction of approximately 14 miles of high-voltage transmission line, waste rock and ore processing facilities, a wastewater treatment plant and ponds, pipelines, and a tailings storage facility capable of impounding 120 million tons of mining waste. Id. ¶ 4. Forest Service authorization is required to develop the mine because its surface facilities and access roads will be located on national forest land. See FS-10522. The project will physically disturb more than 1,500 acres of primarily public lands and inflict long-term harm on more than 7,800 acres. SOF ¶ 5. These impacts will add to the environmental harm already threatened by a second large copper and silver mine approved by FWS for development just over the Cabinet Mountains ridgeline from Montanore—the Rock Creek Mine.

Because the Montanore Mine will adversely affect species listed as threatened under the ESA, id. ¶ 3, the Forest Service was required to engage in formal consultation with FWS under ESA § 7 to ensure that the project will not jeopardize the survival and recovery of bull trout or grizzly bears nor destroy or

adversely modify bull trout critical habitat. 16 U.S.C. § 1536(a)(2).² In this regard, the ESA “is not simply a procedural safeguard” but implements a substantive “legislative mandate ‘to require agencies to afford first priority to the declared national policy of saving endangered species.’” Rock Creek Alliance v. U.S. Fish & Wildlife Serv., 390 F. Supp. 2d 993, 1003 (D. Mont. 2005) (“Rock Creek I”) (quoting Tenn. Valley Auth. v. Hill, 437 U.S. 153, 185 (1978)). Indeed, the ESA “represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” Tenn. Valley Auth., 437 U.S. at 180.

In the challenged BiOps, FWS acknowledged the precarious status of the affected bull trout and grizzly bear populations and found that the Montanore Mine will inflict substantial harm on both species and their habitat. Yet the agency ultimately dismissed the mine’s threats. In the Aquatic BiOp, FWS irrationally determined that the mine’s severe impacts on bull trout and their critical habitat will be too localized to matter to the species’ conservation, without accounting for the already imperiled status of bull trout and critical habitat across the region or assessing where the “tipping point” lies, at which aggregate localized harm to struggling populations jeopardizes the species. In its jeopardy analysis, FWS also

² FWS has not designated critical habitat for grizzlies. FWS-ConsDoc-558.

failed rationally to analyze the magnitude of stream flow reductions the mine will cause and associated effects on bull trout.

Further, FWS unlawfully issued with its Aquatic BiOp an incidental take statement authorizing harm to or killing of bull trout from mining-caused stream flow reductions. The statement provides that allowable take of bull trout will be exceeded if flow reductions from the project prove greater than predicted in the BiOp. But FWS acknowledged that the mine's full effects on stream flows will not materialize for decades after the project begins, by which time it will be too late for meaningful action to protect bull trout from more severe impacts. Consequently, FWS' chosen metric for allowable take cannot serve its regulatory function, which is to alert the agency if the project's effects on protected species prove more severe than anticipated so FWS can timely assess and address the true impacts.

In its Terrestrial BiOp, FWS concluded that the mine's most significant impact on grizzly bears—increased human-caused mortality risks—will not jeopardize grizzlies because the mine proponent, defendant-intervenor Montanore Minerals Corp. (“MMC”), has promised a package of mitigation measures that allegedly will more than offset the harm from the mine by achieving a net reduction in human-caused mortality across the ecosystem. But that conclusion is not supported by evidence indicating the number of grizzlies that are likely to be killed as a result of the mine or the number of grizzly killings that the mitigation

measures reasonably can be expected to prevent. Without such evidence, FWS could only guess that—conveniently—the mine’s mitigation benefits respecting human-caused mortality will cancel out its costs. Indeed, FWS ignored evidence that key mitigation measures relied upon in the BiOp already have been implemented but have not resulted in fewer grizzly bear killings.

In short, FWS failed to justify its counterintuitive conclusion that interposing a large-scale mine in one of the region’s last strongholds for bull trout and grizzly bears will not threaten these species. FWS’s determinations that the Montanore Mine will not jeopardize bull trout or grizzly bears nor destroy or adversely modify bull trout critical habitat lack foundation in the record, contradict the agency’s own findings, and thereby violate the ESA. In reaching the same conclusion based on FWS’s flawed BiOps, the Forest Service violated its own ESA duty to ensure that actions it authorizes are not likely to jeopardize listed species or destroy or adversely modify critical habitat. 16 U.S.C. § 1536(a)(2).³

ARGUMENT

I. STANDARD OF REVIEW

Plaintiffs bring this action pursuant to the Administrative Procedure Act (“APA”), 5 U.S.C. § 706, and the ESA’s citizen suit provision, 16 U.S.C.

³ A complete factual background is provided in Plaintiffs’ Statement of Undisputed Facts. Plaintiffs’ standing to sue is supported by the attached affidavits of Mary Costello, Bonnie Gestring, and Russell Talmo.

§ 1540(g). The APA directs the reviewing court to set aside agency action that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). Under this standard, “[c]ourts must carefully review the record to ensure that agency decisions are founded on a reasoned evaluation of the relevant factors, and may not rubber-stamp administrative decisions that they deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute.” Friends of Yosemite Valley v. Norton, 348 F.3d 789, 793 (9th Cir. 2003) (quotation and alterations omitted). Even where an agency with “technical expertise” is acting “within its area of competence,” “the court need not defer to the agency when the agency’s decision is without substantial basis in fact, and there must be a rational connection between the facts found and the determinations made.” Ariz. Cattle Growers’ Ass’n v. Salazar, 606 F.3d 1160, 1163 (9th Cir. 2010) (citations omitted).

II. FWS ARBITRARILY DETERMINED THAT THE MONTANORE MINE WILL NOT JEOPARDIZE BULL TROUT

FWS violated the ESA in determining that severe mining impacts to some of the best remaining bull trout habitat in northwest Montana—including dewatering of streams now providing essential habitat functions—will not jeopardize the species. FWS found that the mine will inflict severe damage on bull trout within the Lower Clark Fork and Kootenai River watersheds, causing reduction or extirpation of localized bull trout populations that will in turn “slow the rate of

survival and recovery” of the larger Lower Clark Fork and Kootenai River “core area” populations. FWS-ConsDoc-956-61. As documented in the Aquatic BiOp, these losses will occur as a result of mining-induced stream flow reductions that will cause “significant and permanent degradation to important local bull trout populations,” FWS-ConsDoc-959; see FWS-ConsDoc-944, 950-51; SOF ¶¶ 37-44; increased stream temperatures due to flow reductions and substantial discharges of mine wastewater that will be too warm for bull trout, FWS-ConsDoc-951-52; SOF ¶¶ 47-50; and substantial sediment pollution during the project’s initial phases that will inflict “severe impacts” on bull trout, FWS-ConsDoc-952-54, 957; SOF ¶¶ 51-52. As FWS acknowledged, these impacts will add to threats posed to bull trout by the nearby Rock Creek Mine. FWS-ConsDoc-974-75.

Yet FWS ultimately dismissed these impacts, concluding that the mine will not jeopardize bull trout survival or recovery “based on the magnitude of the project effects (to [bull trout] reproduction, distribution, and abundance) in relation to the listed population.” FWS-ConsDoc-983. In other words, FWS decided the harm the mine will inflict on bull trout is too localized to matter because it will damage or destroy only a subset of bull trout populations in the region. See FWS-ConsDoc-981-83. That conclusion is arbitrary because it is not supported by evidence that the mine’s severe localized impacts, on top of a degraded baseline, will not tip the species too far into danger. Further, FWS’s assessment of even the

project's localized impacts is unlawful because the agency arbitrarily disregarded evidence of severe stream flow reductions from the mine and failed to follow the ESA's policy of institutionalized caution in addressing substantial uncertainty in the evidence it did consider.

A. FWS Irrationally Concluded that the Mine's Impacts Will Be Too Localized to Matter

FWS's no-jeopardy determination for bull trout is unlawful because the agency dismissed the Montanore Mine's concededly severe threats to bull trout in the project area without accounting for the species' already imperiled status across the region or assessing the levels of bull trout abundance, distribution, and life-history diversity that are necessary for its conservation. Without that analysis, FWS could not rationally conclude that the damage the mine will inflict on bull trout will not rise to the level of jeopardy. See Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 524 F.3d 917, 936 (9th Cir. 2007) ("It is only logical to require that the agency know roughly at what point survival and recovery will be placed at risk" before it may rationally dismiss significant localized impacts); Rock Creek Alliance v. U.S. Forest Serv., 703 F. Supp. 2d 1152, 1205 (D. Mont. 2010) ("Rock Creek II"), aff'd 663 F.3d 439 (9th Cir. 2011) (holding FWS's dismissal of significant localized impacts risks "leav[ing] the species subject to death by a thousand pinpricks") (quotation omitted).

“Jeopardy” occurs within the meaning of § 7 when an action “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02.⁴ Jeopardy determinations must be based on “the best scientific and commercial data available,” 16 U.S.C. § 1536(a)(2), and account for the species’ current status and existing threats, the direct and indirect effects of the action, and the cumulative effects of foreseeable future actions, 50 C.F.R. §§ 402.02, 402.14(g)(2)-(3).

Because FWS has determined that sustaining bull trout populations within each of five designated “interim recovery units”—including the Columbia River interim recovery unit that the Montanore Mine will affect—is essential for the species’ conservation, FWS considers actions that jeopardize bull trout within an interim recovery unit to jeopardize the species. FWS-ConsDoc-891, 974. To determine whether an action will jeopardize an interim recovery unit population, FWS analyzes effects at smaller management scales: first at the scale of the affected local populations; then at the larger scale of the affected core areas, which consist of one or more interbreeding local populations and represent the basic unit on which FWS gauges bull trout recovery; then at the larger “management unit”

⁴ In its jeopardy analysis, FWS must analyze threats to both survival and recovery, and significant impairment of recovery prospects alone may constitute jeopardy. Nat’l Wildlife Fed’n, 524 F.3d at 932.

scale. FWS-ConsDoc-899-901. The Montanore Mine will harm the Rock Creek and Bull River local populations within the Lower Clark Fork River core area and the Libby Creek and West Fisher River local populations within the Kootenai River core area.⁵ FWS-ConsDoc-905.

In the Aquatic BiOp, FWS determined that the mine will diminish or destroy bull trout populations in project-area streams. SOF ¶¶ 36, 49, 52. FWS further determined that the mine's severe localized impacts will harm the Lower Clark Fork and Kootenai River core areas, "slow[ing] the rate of survival and recovery" and increasing the long-term "challenge of survival and recovery" for both core area populations. FWS-ConsDoc-959-61; SOF ¶ 53. Nevertheless, FWS concluded that the mine's "significant and permanent degradation to important local bull trout populations," FWS-ConsDoc-959, will not jeopardize the survival or recovery of the affected core areas, management units, or interim recovery unit because that degradation will affect only a subset of bull trout populations and habitat at each management scale. See FWS-ConsDoc-979-82, 983 (stating no-jeopardy determination is "based on the magnitude of the project effects ... in relation to the listed population").

⁵ The Rock Creek and Bull River local populations encompass bull trout and their habitat in the mainstem, East Fork, and West Fork of Rock Creek and East Fork Bull River. SOF ¶ 32. The Libby Creek and West Fisher River local populations encompass bull trout and their habitat in Libby, Big Cherry, Bear, Cable, Midas, Poorman, Ramsey, and West Fisher Creeks and the Fisher River. Id. ¶ 31.

In reaching that conclusion, however, FWS failed to account for the species' already imperiled status in the affected areas and rationally assess where the tipping point lies, beyond which aggregate localized harm will threaten the species' conservation. In the BiOp's "Status of the Species" analysis, FWS noted that—even without the Montanore and Rock Creek mines—the Lower Clark Fork River core area population already is at "high risk" of extirpation "because of very limited and/or declining numbers, range, and/or habitat." FWS-ConsDoc-895 (citing 2005 FWS status assessment). Based on these same criteria, the Kootenai River core area population is "at risk" of extirpation. Id. Further, of the four core areas supporting the larger Kootenai River Basin management unit, two are "at risk" of extirpation and one is at "high risk" of extirpation due to "extremely limited and/or rapidly declining numbers, range, and/or habitat"; just one core area is at "low risk." Id.⁶ At the scale of the Columbia River interim recovery unit, FWS acknowledged that bull trout have been extirpated from more than half their historic range and currently "[f]ew bull trout core areas are considered strong in

⁶ FWS did not describe the status of other core areas within the Clark Fork River management unit based on its 2005 status assessment, see FWS-ConsDoc-895; instead, it cited 1998 data in asserting that bull trout populations "are considered strong" in three rivers, out of an undisclosed total, within the management unit, FWS-ConsDoc-982. FWS's failure to consider the 2005 data—which show 73% of core areas in the Clark Fork River management unit were "at risk" or "high risk" of extirpation, FWS-Lit-42101-02; FWS-Lit-41362, is itself arbitrary. See Nat. Res. Def. Council v. Kempthorne, 506 F. Supp. 2d 322, 362-67 (E.D. Cal. 2007) (holding agency violated ESA's best available science requirement by disregarding most recent population data).

terms of relative abundance and core area stability.” FWS-ConsDoc-894. Overall, FWS determined that the remaining bull trout populations across the Columbia River Basin “are at best stable and more often declining.” *Id.* (citations omitted). Indeed, FWS estimated that, throughout the lower-48 United States, strong bull trout populations persist in just 6% of the species’ historic range. FWS-ConsDoc-890.

This grim assessment is reinforced by a 2013 FWS-Forest Service analysis cited in the Aquatic BiOp, which concluded that “bull trout are clearly threatened by habitat limitations across most of their range in western Montana.” FWS-Lit-37222. The agencies determined that only four of the 13 complex core areas in western Montana—those comprising more than one local population, FWS-Lit-37206—have significant numbers of bull trout remaining, and these more abundant populations are only in lakes or reservoirs; “[a]ll of the river-dependent or fluvial populations are at unsustainably low levels,” FWS-Lit-37217.

Yet these key facts are absent from FWS’s jeopardy analysis. In that section of the BiOp, FWS made no mention of the precarious status of the affected core areas, management units, and recovery unit and failed to analyze whether, given the severely degraded baseline, the additive harm from the mine is likely to compromise the species’ survival or recovery. *See* FWS-ConsDoc-974-83.

Instead, FWS dismissed the mine's effects "based on the magnitude of the project effects ... in relation to the listed population." FWS-ConsDoc-983.

But dismissing the mine's effects as too localized to matter at the scale of the listed entity makes sense only if bull trout populations outside the mine's sphere of impacts are sufficiently healthy to sustain and recover the species notwithstanding losses from the mine. Conversely, where, as here, the agency's own review of the species' status reveals that populations across the relevant management scales are largely on the brink, localized populations cannot rationally be discarded as insignificant without further analysis. Logically, that analysis must incorporate information about the species' status beyond the project area and identify the levels of bull trout abundance, distribution, and life-history diversity that are necessary to conserve the species at the relevant management scales. Indeed, if FWS were permitted to reach a no-jeopardy determination without such analysis simply because the action's impacts will be localized, "a listed species [could] be gradually destroyed, so long as each step on the path to destruction is sufficiently modest. This type of slow slide into oblivion is one of the very ills the ESA seeks to prevent." Nat'l Wildlife Fed'n, 524 F.3d at 930. See also Pac. Coast Fed'n of Fishermen's Ass'ns v. Nat'l Marine Fisheries Serv., 265 F.3d 1028, 1036-37 (9th Cir. 2001) (holding agency arbitrarily dismissed impacts of logging

projects as inconsequential to conservation of listed fish at watershed scale without rationally analyzing projects' aggregate effects on already degraded habitat).

This Court has twice affirmed this principle in analyzing the effects of the Rock Creek Mine. In Rock Creek I, this Court held FWS's no-jeopardy determination for bull trout was unlawful because, in dismissing the mine's localized impacts as insignificant, the agency failed to account for evidence that "the current status of the species is marginal" throughout the Columbia River Basin. 390 F. Supp. 2d at 1001. In Rock Creek II, this Court reaffirmed that dismissing localized impacts as insignificant without a thorough analysis of the species' condition beyond the project area unacceptably "leave[s] the species subject to 'death by a thousand pinpricks.'" 703 F. Supp. 2d at 1205 (quoting Rock Creek I, 390 F. Supp. 2d at 1001). In the latter case, this Court held that FWS had addressed this concern with an "expanded review of the current status of the species across its range." Id. Here, however, FWS inventoried the species' marginal status in the Lower Clark Fork and Kootenai River core areas and Columbia River interim recovery unit, but then failed entirely to account for that status in its jeopardy analysis. Such an approach pays mere lip service to the

principle articulated in the Rock Creek cases.⁷ Further, FWS’s approach violates the ESA requirement that the agency “know roughly at what point survival and recovery will be placed at risk before it may conclude that no harm will result from ‘significant’ impairments to habitat”—and associated populations—“that [are] already severely degraded.” Nat’l Wildlife Fed’n, 524 F.3d at 936. Without such analysis, the agency cannot rationally conclude that the mine’s effects—given the already-imperiled status of bull trout in the region—will not “tip[] a listed species too far into danger.” Id.

Relatedly, FWS’s no-jeopardy determination fails to account for the fact that the bull trout populations the mine will diminish or destroy are not fungible with other populations, but instead have special conservation value. As a result, their loss or diminishment cannot rationally be dismissed simply because other populations persist in the relevant management areas. Within the Lower Clark Fork River core area, the local populations the mine will damage—East Fork Bull River and Rock Creek—provide “significant contributions of bull trout” to the core area and include the only spawning populations remaining in the core area’s

⁷ Moreover, FWS itself has acknowledged that “unlike the Rock Creek Mine, the Montanore Mine will have much more severe impacts in that several bull trout streams in two different bull trout core areas are predicted to be adversely affected either permanently or for extended periods through ground-water and surface-water depletions.” FWS-Mit-228 (emphasis added). That the Montanore Mine’s impacts will be substantially more severe and affect bull trout in multiple management areas heightens FWS’s burden in dismissing the significance of the mine’s effects.

Cabinet Gorge Reservoir reach. FWS-ConsDoc-961, 978. Indeed, “East Fork Bull River is the single-most important bull trout spawning and rearing stream in the Lower Clark Fork bull trout core area.” FWS-ConsDoc-8673 (emphasis in original). Accordingly, FWS determined that “maintaining spawning and rearing success in these two local populations is essential to maintaining the existing survival status and potential for recovery of the [Lower Clark Fork River] bull trout core area population.” FWS-ConsDoc-978. Ultimately, FWS determined these populations will not be able to maintain their spawning and rearing success in the face of the Montanore Mine. See SOF ¶¶ 41-43 (describing predicted losses in spawning habitat); FWS-ConsDoc-959 (describing “significant and permanent” degradation of these populations due to mining-induced stream depletions and associated loss of spawning and juvenile habitat). But, contradicting its own quoted finding, FWS stated in its jeopardy analysis that reduced spawning and rearing success in Rock Creek and East Fork Bull River will not “appreciabl[y]” affect the core area, noting that “five more primary spawning and rearing streams help support this core area population with smaller contributions from several secondary streams.” FWS-ConsDoc-979.⁸

⁸ This conclusion also appears to rest on the agency’s suggestion that harm to the Rock Creek and East Fork Bull River populations will not be too severe after all. In this regard, FWS asserted that, notwithstanding predicted stream flow depletions, “most of the available habitat (85-90 percent) for both local populations will be unaffected; consequently, the majority of the spawning areas for both

Similarly, within the Kootenai River core area the mine will damage the bull trout population in Libby Creek—“an important primary bull trout spawning and rearing stream” with both resident and migratory life-history forms, FWS-ConsDoc-980-81, and may destroy entirely the resident population upstream of Libby Creek falls, which FWS described as one of the two “most resilient” populations in the watershed, FWS-ConsDoc-951, 980. The mine also will damage populations in Bear Creek and West Fisher River, which provide the greatest contributions of bull trout to the core area. FWS-ConsDoc-957. Yet FWS again concluded that damaging or destroying these important populations will not

populations will remain largely intact and useable.” FWS-ConsDoc-978. But that assertion is contradicted by FWS’s own findings that flow reductions will damage the reach of East Fork Bull River that “currently supports much of the bull trout spawning known to occur at this time,” *id.*, and will prevent migratory bull trout in Rock Creek—the life-history form FWS’s draft recovery plan emphasizes as most important to the species’ conservation, *id.*—from accessing spawning areas in at least nine out of every ten years, FWS-ConsDoc-976. Further, as explained *infra*, Point II.B, FWS arbitrarily disregarded evidence that maximum baseflow reductions in East Fork Bull River will reach 97%—more than seven times the impact disclosed in the Aquatic BiOp—translating to more severe habitat and population losses than FWS considered.

appreciably affect the core area, citing other streams that contribute to the core area population. FWS-ConsDoc-980-81.⁹

In this way, FWS irrationally treated as fungible bull trout populations its own analysis demonstrates have special conservation value. As the Ninth Circuit has recognized, loss of a local bull trout population, “depending on the role it played in the larger interim recovery unit, might be significant enough to ‘reduce appreciably the likelihood of both the survival and recovery’ of the interim recovery unit.” Wild Fish Conservancy v. Salazar, 628 F.3d 513, 523 (9th Cir. 2010) (quoting 50 C.F.R. § 402.02); see also id. at 529. But in the Aquatic BiOp, FWS failed rationally to consider whether damaging concededly important bull trout populations would significantly harm even the affected core areas, let alone the larger interim recovery unit. FWS thus “‘entirely failed to consider an important aspect of the problem,’” rendering its no-jeopardy determination

⁹ In addition, FWS again diminished localized impacts it earlier characterized as more severe. Compare FWS-ConsDoc-951 (stating warm-water discharges combined with flow reductions “pose[] a serious threat to the viability of the Libby Creek bull trout population residing upstream of Libby Creek falls”) with FWS-ConsDoc-981 (stating, without explanation, that “[i]t is likely that the resident bull trout population in Libby Creek above the barrier falls would continue to persist”). FWS’s more optimistic characterization of localized impacts cannot be credited where it inexplicably contradicts the agency’s own factual findings earlier in the BiOp. Pac. Coast Fed’n of Fishermen’s Ass’ns v. Gutierrez, 606 F. Supp. 2d 1122, 1168 (E.D. Cal. 2008) (“When an agency’s factual findings and analyses are contradictory, or when such findings and analyses contradict the BiOp’s conclusion, the agency’s path cannot be reasonably discerned” and its decision cannot be upheld) (citing Nat’l Ass’n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 658 (2007)).

unlawful. Pac. Coast Fed'n, 265 F.3d at 1034 (quoting Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)).

In sum, FWS's no-jeopardy determination for bull trout is not supported by evidence that bull trout populations beyond the mine's reach are adequate to ensure the species' survival and recovery regardless of the mine's effects—indeed, substantial evidence demonstrates the contrary—and fails to account for the special conservation value of bull trout populations the mine will damage or destroy. Accordingly, FWS's decision violates the ESA and should be set aside.

B. FWS Irrationally Evaluated the Impacts of Stream Flow Reductions on Bull Trout

FWS's no-jeopardy determination also is arbitrary because the agency irrationally evaluated the significant threat to bull trout from mining-induced stream flow reductions. Specifically, FWS failed to account for substantial uncertainty in its predictions of flow reductions and associated habitat impacts. In so doing, it failed to “give the benefit of the doubt to the species” as the ESA requires. League of Wilderness Defenders v. Connaughton, 752 F.3d 755, 763 (9th Cir. 2014) (quoting Conner v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988)). Further, FWS inexplicably ignored the full scope of dewatering impacts predicted to occur in East Fork Bull River—the most important bull trout spawning stream in the Lower Clark Fork River core area—in violation of the ESA's best available science requirement. 16 U.S.C. § 1536(a)(2).

Development of the Montanore Mine will permanently disrupt the natural groundwater system in the project area. SOF ¶¶ 38, 44. As mining progresses, groundwater that currently feeds clean, cold water into bull trout-occupied streams within and downstream of the Cabinet Mountains Wilderness will begin flowing into the mine void, reducing baseflows in overlying streams. Id. ¶ 38. Surface water diversions for mine operations, as well as operation of pumpback wells intended to capture contaminated water that will seep from the mine's tailings impoundment, will further reduce flows. Id. Impacts on bull trout will be "significant" as baseflow conditions or extended dry periods in northwest Montana typically coincide with the most sensitive stages in the bull trout life cycle—spawning and egg incubation. Id. ¶¶ 37, 39.

Throughout the project area, FWS determined that mining-induced baseflow reductions will (1) reduce bull trout habitat availability—particularly spawning habitat—during low-flow conditions, reducing reproductive potential and populations; (2) create or exacerbate barriers to upstream fish passage, reducing access to spawning areas—particularly for migratory fish—and increasing bull trout mortality from stranding; (3) reduce survival of bull trout eggs and fry; and (4) disrupt the temperature-moderating effects of groundwater inflow in streams, creating unfavorable temperature conditions and further reducing populations. Id. ¶ 43. Baseflow reductions will damage the reach of East Fork Bull River that

“currently supports much of the bull trout spawning (and egg incubation) known to occur in the drainage.” FWS-ConsDoc-960. In Rock Creek, baseflow reductions will permanently impact “the known existing spawning habitat for the resident bull trout” and exacerbate fish passage restrictions, inflicting potentially “severe” impacts on migratory fish. FWS-ConsDoc-959, 975; see FWS-EM-4425 (Forest Service biologist stating “any decrease in [Rock Creek] flows could be significant” for bull trout given existing low-flow challenges) (emphasis added). In Libby Creek, baseflow reductions combined with discharges of excessively warm wastewater threaten to completely wipe out the important resident bull trout population upstream of Libby Creek Falls. SOF ¶ 49.

To quantify the magnitude of flow reductions and habitat losses in specific streams, FWS and the Forest Service relied on a three-dimensional groundwater modeling exercise completed by the consultant AMEC Geomatrix in 2011. Id. ¶ 40. Based on the model results, FWS stated in the BiOp that mining will reduce baseflows on a long-term or permanent basis by more than 20% in Libby Creek at the wilderness boundary, by 11.6% in Poorman Creek, by nearly 9% in East Fork Rock Creek, by 7.7% in mainstem Rock Creek, and by nearly 13% in East Fork Bull River at the wilderness boundary. Id. ¶ 41. FWS predicted roughly proportional losses in bull trout spawning habitat, as well as significant habitat losses for juvenile and adult fish. Id. ¶ 42. Based on these estimates, FWS

determined that flow reductions will reduce the affected populations but not to an extent that effects at the core-area scale will be appreciable. See FWS-ConsDoc-977-81.

FWS described the model on which it relied as providing “the best currently available estimates of impacts and associated uncertainty that can be obtained using groundwater models.” FWS-ConsDoc-944. Nevertheless, FWS conceded that “error margins can be quite wide with complex models” and actual stream flow changes “could be much greater or lesser” than model predictions. FWS-ConsDoc-975-76. Nevertheless, the Aquatic BiOp contains no analysis of effects on bull trout if flow reductions do prove “much greater” than estimated. Id.¹⁰

By omitting analysis of the impact of greater flow reductions on bull trout and their habitat, FWS unlawfully “failed to consider an important aspect of the problem.” State Farm, 463 U.S. at 43. Under the ESA, the risk that FWS’s modeled predictions will prove inaccurate “must be borne by the project, not by the endangered species.” Sierra Club v. Marsh, 816 F.2d 1376, 1386 (9th Cir.

¹⁰ Even starker statements of uncertainty regarding modeled flow reductions appear in the record of the Forest Service’s decision. In a 2012 letter, the mine proponent itself declared that “the agencies continue to push the model far beyond its scientifically sensible limits” by treating its quantitative predictions as absolute. FS-56403. In 2013, a Forest Service hydrogeologist asserted that the Forest Service, Montana Department of Environmental Quality, and MMC all agreed that the modeling “is too crude a tool to use as a predictor of stream depletions.” FS-232604. But as explained infra, Point VI, the Forest Service nevertheless adopted FWS’s no-jeopardy determination without addressing the potential for greater-than-predicted flow reductions.

1987), abrogation on other grounds recognized by Cottonwood Env'tl. Law Ctr. v. U.S. Forest Serv., 789 F.3d 1075 (9th Cir. 2015). Given FWS's concession that the model suffered from substantial uncertainty and actual baseflow reductions could be "much greater" than predicted, FWS- ConsDoc-975-76, FWS could not rationally assume without further analysis that the maximum flow reductions and habitat impacts predicted by the model necessarily reflect the maximum harm bull trout will suffer from the project. See Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., No. 3:01-cv-00640-SI, 2016 WL 2353647, at *30-31, 35 (D. Ore. May 4, 2016) (holding agency's assumption that concededly uncertain predictions of mitigation effectiveness would prove accurate constituted "an improper allocation of risk onto the listed species" in violation of the ESA). FWS's approach fails to provide a margin for error that is rationally related to the substantial uncertainty it expressed in its own predictions, which impermissibly "places all of the risk of that uncertainty on the species." Id. at *31.¹¹

In addition, while FWS relied conclusively on model-generated predictions of baseflow reductions, it was arbitrarily selective in its consideration of those data. To satisfy the ESA's "best available science" requirement, 16 U.S.C.

¹¹ The risk to bull trout if FWS's predictions prove inaccurate is especially acute because the true magnitude of mining-induced flow reductions will not manifest for decades after the project commences, by which time the "damage to the groundwater system will be complete" and there will be no opportunity to mitigate the harm from more severe flow reductions. FWS-ConsDoc-959; SOF ¶ 46.

§ 1536(a)(2), “FWS ‘cannot ignore available biological information.’” Kern County Farm Bureau v. Allen, 450 F.3d 1072, 1080-81 (9th Cir. 2006) (quoting Conner, 848 F.2d at 1454). But in the Aquatic BiOp, FWS inexplicably disregarded model results indicating that mining will reduce baseflows in East Fork Bull River by 97% within the Cabinet Mountains Wilderness, FS-8479 (Joint Final EIS summarizing data from Geomatrix 2011); FWS-EM-4580 (excerpt from Geomatrix 2011 report), incorrectly asserting that maximum baseflow reductions and associated losses of spawning habitat will not exceed 13%. FWS-ConsDoc-946-47, 950, 960. This is arbitrary on its face. See State Farm, 463 U.S. at 43 (decision is arbitrary where it “runs counter to the evidence before the agency”). Further, FWS’s error affected a critical agency determination; as Interior Department officials noted in comments addressing the groundwater model, a 97% reduction of baseflows in East Fork Bull River

[w]hen combined with expected climate change impacts ... would adversely impact the value of the upper East Fork Bull River for spawning and rearing habitat, including the possibility of serious population reductions or even extirpation of bull trout from the East Fork Bull River.

FWS-ConsDoc-8673 (emphasis added). As a consequence of ignoring available baseflow data, FWS never considered the effect on the species if bull trout are extirpated from East Fork Bull River— “the single-most important bull trout spawning and rearing stream in the Lower Clark Fork bull trout core area.” Id.

(emphasis in original). Further, because 80% of observed bull trout spawning nests—or “redds”—in East Fork Bull River occur upstream of the wilderness boundary, id., FWS’s failure to consider predicted flow reductions in the wilderness renders its assessment of impacts on the local and core area populations irrational and unlawful under the ESA. 16 U.S.C. § 1536(a)(2); Kern County, 450 F.3d at 1080-81.

III. FWS ARBITRARILY DETERMINED THAT THE MINE WILL NOT DESTROY OR ADVERSELY MODIFY BULL TROUT CRITICAL HABITAT

FWS also acted arbitrarily in dismissing as too localized to matter the substantial, irreversible harm the mine will inflict on bull trout critical habitat in areas the agency found “essential” to the species’ conservation. FWS-ConsDoc-902-03, 983. As in its no-jeopardy determination, in concluding that the mine will not destroy or adversely modify critical habitat FWS failed rationally to consider the degraded status of bull trout critical habitat region-wide or assess the levels of habitat abundance and diversity that are necessary to conserve the species.

The ESA requires FWS to determine, based on the best available science, whether a project will destroy or adversely modify a listed species’ critical habitat. 16 U.S.C. § 1536(a)(2). FWS must rationally analyze whether predicted harm to critical habitat, “when added to the environmental baseline, is likely to result in significant adverse effects throughout the species’ range, or appreciably diminish

the capability of the critical habitat to satisfy essential requirements of the species.”

Butte Env'tl. Council v. U.S. Army Corps of Eng'rs, 620 F.3d 936, 948 (9th Cir.

2010) (quotation omitted); see 50 C.F.R. § 402.02.

The Montanore Mine will damage bull trout critical habitat in Libby, Bear, West Fisher, and Rock Creeks and East Fork Bull River due to permanent baseflow depletions, pollution with sediment and unacceptably warm wastewater, and habitat changes benefitting nonnative fish. FWS-ConsDoc-983. The affected critical habitat lies in the Lower Clark Fork and Kootenai River core areas, which form part of the Lower Clark Fork River Basin and Kootenai River Basin critical habitat units, respectively, within the Columbia River interim recovery unit. Id. In the BiOp, FWS stated that designated critical habitat in the Lower Clark Fork River Basin is “essential” for maintaining bull trout distribution in the larger Columbia River Basin because it encompasses the “evolutionary heart” of the river-dwelling migratory life-history form and provides key spawning and rearing habitat and “an essential migratory corridor.” FWS-ConsDoc-902-03. Critical habitat in the Kootenai River Basin also is “essential to bull trout recovery” because it supports the strongest river-dwelling population across the species’ range and supports “the single largest spawning run of adult bull trout.” FWS-ConsDoc-902. Yet the critical habitat the mine will harm within these areas already is “functioning at risk” or “unacceptable risk” for bull trout, FWS-

ConsDoc-936-38, and FWS determined that mining will further “permanently reduce the functional ability of the affected critical habitat to a significant degree.” FWS-ConsDoc-984.¹²

Yet, echoing the rationale for its flawed no-jeopardy determination, FWS concluded that critical habitat impacts will not rise to the level of “destruction or adverse modification” “based on the magnitude of the project effects in relation to the designated critical habitat at the Columbia River basin scale.” FWS-ConsDoc-983. Specifically, because the mine will damage (1) 40.7 stream miles out of 325 miles of streams and 29,873 acres of lakes and reservoirs designated as critical habitat within the Kootenai River Basin, and (2) 16.3 stream miles out of 3,328 miles of streams and 295,587 acres of lakes and reservoirs designated as critical habitat in the Clark Fork River Basin, FWS determined that the project’s “impact on the abundance and quality of designated critical habitat” in the affected core

¹² Later in its critical habitat analysis, FWS contradicted this conclusion by stating that the integrity of affected critical habitat “would be diminished functionally by a small degree” only. FWS-ConsDoc-985-86. FWS’s unexplained shift from “significant” to “small” impacts is not rationally supported by the record, which indicates that—consistent with the agency’s own earlier finding—the mine’s damage to critical habitat will be “significant.” FWS-ConsDoc-984. For example, as discussed above, the mine will permanently reduce baseflows by 7-97% in bull trout critical habitat, causing roughly proportional losses in spawning habitat. SOF ¶¶ 41-42, 54. The most severe flow reductions will damage East Fork Bull River, the most important spawning and rearing stream in the Lower Clark Fork core area, FWS-ConsDoc-8673, and in Libby Creek, flow reductions and warm-water pollution may render critical habitat completely uninhabitable for bull trout, see SOF ¶ 49.

areas and critical habitat units “would be small, and therefore, not likely to be appreciabl[e].” FWS-ConsDoc-984-86.

That conclusion is arbitrary because it is not supported by any assessment of the baseline status of bull trout critical habitat across the affected core areas, critical habitat units, or interim recovery unit and fails to account for FWS’s own findings that critical habitat in the affected areas serves essential functions. In the Aquatic Biop’s “Status of Bull Trout Critical Habitat” section, FWS stated only that “[t]he condition of bull trout critical habitat varies across its range from poor to good,” FWS-ConsDoc-898, providing no assessment of critical habitat status in the affected management areas or the number of stream miles, distribution of habitat, or diversity of habitat types (e.g., spawning and rearing) that are necessary to meet the species’ survival and recovery needs. See FWS-ConsDoc-896-98. FWS’s status discussion, such as it is, does not satisfy its obligation to “[e]valuate the current status of the ... critical habitat” for the species at issue. 50 C.F.R. § 402.14(g)(2).

Further, FWS could not rationally dismiss the mine’s impacts based on the small number of affected stream miles relative to designated critical habitat within the relevant management areas without analyzing whether the remaining habitat is adequately abundant, diverse, and well distributed to satisfy the species’ conservation needs. FWS-ConsDoc-902-03; Nat’l Wildlife Fed’n, 524 F.3d at 936

(FWS must assess “at what point survival and recovery will be placed at risk” before dismissing significant localized harm to critical habitat). Relatedly, FWS had to determine whether the special conservation functions of the habitat the mine will damage are adequately replicated elsewhere. See Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1075 (9th Cir. 2004) (holding FWS may not rely on scale of critical habitat impacts to find no destruction/adverse modification where analysis masks the significance of localized impacts). Under FWS’s approach, it could lawfully conclude that project after project will not destroy or adversely modify critical habitat based on the localized scale of impacts, blind to the reality that project impacts were cumulatively destroying much or all of a species’ critical habitat across a region or its entire range—a result the ESA prohibits. See Nat’l Wildlife Fed’n, 524 F.3d at 930. Accordingly, FWS’s critical habitat determination for bull trout violates the ESA and should be set aside.

IV. FWS ISSUED AN UNLAWFUL INCIDENTAL TAKE STATEMENT FOR BULL TROUT

FWS also violated the ESA and its implementing regulations in issuing an incidental take statement authorizing the harming or killing of bull trout due to baseflow reductions. FWS-ConsDoc-990-91.

Where, as here, FWS determines an action will not jeopardize a listed species or destroy or adversely modify critical habitat, but is likely to result in incidental taking, the agency must provide with its BiOp a statement authorizing

such taking. 16 U.S.C. § 1536(b)(4); Ore. Nat. Res. Council v. Allen, 476 F.3d 1031, 1034 (9th Cir. 2007). “Take” includes killing or harming a listed species and is generally prohibited by the ESA. 16 U.S.C. §§ 1532(19), 1538(a)(1)(B). However, take that complies with limitations in an incidental take statement is exempt from the statutory prohibition. Id. § 1536(o)(2); 50 C.F.R. § 402.14(i)(5). But if the extent of take authorized in the statement is exceeded, the “safe harbor” from liability lapses and the agency authorizing the action and FWS must immediately reinitiate consultation. 50 C.F.R. §§ 402.14(i)(4), 402.16(a). In this way, “the [incidental take statement] serves as a check on the agency’s original decision that the incidental take of listed species resulting from the proposed action will not jeopardize the ... species.” Ctr. for Biological Diversity v. Salazar, 695 F.3d 893, 911 (9th Cir. 2012) (quotation and alteration omitted).

FWS’s authorization for incidental take of bull trout due to mining-induced baseflow reductions is unlawful for two reasons. First, FWS did not rationally “[s]pecif[y] the impact, i.e., the amount or extent,” of the authorized taking as ESA implementing regulations require, 50 C.F.R. § 402.14(i)(1)(i), because it ignored evidence that baseflow reductions in East Fork Bull River will greatly exceed predictions in the BiOp. The incidental take statement asserts that maximum baseflow reductions in East Fork Bull River will not exceed 12.9% and authorizes take of bull trout caused by flow reductions up to and including that predicted

value. FWS-ConsDoc-991. But as explained supra, Point II.B, the groundwater model on which FWS relied predicts that mining will reduce baseflows in East Fork Bull River by up to 97%, FS-8479; FWS-EM-4580—more than seven times the reduction described in the incidental take statement—damaging the area supporting most observed bull trout redds and potentially extirpating bull trout from East Fork Bull River, FWS-ConsDoc-8673. By drastically underrepresenting the magnitude of predicted flow reductions in East Fork Bull River, FWS did not rationally specify the amount or extent of anticipated take, in violation of governing regulations. 50 C.F.R. § 402.14(i)(1)(i).

Second, FWS’s authorization for take due to baseflow reductions across the project area violates the ESA because it cannot serve its regulatory function, which is to “set forth a “trigger” that, when reached, results in an unacceptable level of incidental take,” thereby alerting FWS and the Forest Service of the need to re-initiate ESA consultation to ensure that excessive take will not jeopardize the species. Ore. Nat. Res. Council, 476 F.3d at 1038 (quoting Ariz. Cattle Growers’ Ass’n v. U.S. Fish & Wildlife Serv., 273 F.3d 1229, 1249 (9th Cir. 2001)); see 50 C.F.R. § 402.16(a). Based on FWS’s assertion that it could not quantify the expected amount of take from flow reductions (for example, by predicting the number of bull trout that will be killed), FWS decided to rely on “the extent and magnitude of predicted stream flow depletions” to measure allowable take. FWS-

ConsDoc-989. Thus, the incidental take statement provides that allowable take will be exceeded—and reinitiation of consultation required—“if the measured level of baseflow depletions exceeds the predicted baseflow depletions described [in the BiOp] for each stream ... and each ‘Streamflow Impact Estimate Location’” or “if the length of affected stream reach is more than that described for each affected stream.” FWS-ConsDoc-991. However, FWS acknowledged that “in most cases the actual observable flow depletions affecting bull trout aren’t predicted to occur until well after mining is completed,” FWS-ConsDoc-945, at which point the mine’s “damage to the groundwater system will be complete” and only “slight” improvements will be possible, FWS-ConsDoc-959. Thus, flow reductions exceeding predicted levels would not trigger reinitiation of consultation before the mine’s full effects are irrevocably unleashed on bull trout. Because it will be too late to mitigate the harm to bull trout from excessive take, the incidental take statement cannot “serve[] as a check on the agency’s original decision that the incidental take ... will not violate section 7(a)(2) of the ESA” and the statement therefore violates ESA requirements. Ctr. for Biological Diversity, 695 F.3d at 913 (quotation omitted); see Ore. Nat. Res. Council, 476 F.3d at 1038.

V. FWS ARBITRARILY DETERMINED THAT THE MONTANORE MINE WILL NOT JEOPARDIZE GRIZZLY BEARS

FWS further violated the ESA in assessing the mine’s impacts on the Cabinet-Yaak grizzly population—one of only five populations persisting in the

lower-48 United States in areas representing just 1-2% of the species' historic range. SOF ¶ 69. FWS has determined that each of these remnant populations is essential to the species' survival. Id. ¶ 70. In the Terrestrial BiOp, FWS estimated as few as 42 bears remain in the Cabinet-Yaak—less than half the agency's recovery goal—and the population is declining. Id. ¶ 73. As few as 21 bears remain in the Cabinet Mountains portion of the ecosystem where the mine will be located, effectively isolated from grizzlies in the Yaak River drainage. Id. ¶¶ 74-75. The extremely low number of grizzlies in the Cabinets places the population at “high risk of extinction.” FWS-Lit-12941. Indeed, Montana's program of “augmenting” the population by trucking in bears from other regions is the reason grizzlies still exist there at all. SOF ¶ 74.

Against this backdrop of unsustainably low and declining numbers, the Montanore Mine will displace up to three-quarters of female grizzlies in the Cabinets from preferred habitat to a degree that impairs reproduction, exacerbate habitat fragmentation, and—most significantly—substantially increase the number of people in grizzly habitat, increasing human-caused mortality risks. Id. ¶¶ 82, 96. Nevertheless, FWS concluded the mine will not jeopardize grizzlies. Indeed, FWS found that mine development will benefit grizzlies because promised mitigation measures will achieve a net reduction in human-caused mortality across the Cabinet-Yaak compared to the pre-project baseline. Id. ¶¶ 81, 89. In this

regard, FWS relied upon MMC's commitment to fund 1) electric fencing and bear-resistant garbage containers to deter grizzly activity at mine facilities and area residences, campgrounds, and garbage-transfer stations; (2) public education programs on grizzly coexistence; (3) a second Montana Fish, Wildlife and Parks grizzly bear specialist to focus on conflict-reduction in the project area; (4) a second state wildlife law enforcement position for the area; and (5) a grizzly monitoring study; and Forest Service road and trail access measures intended to mitigate increased human use of grizzly habitat. Id. ¶ 90.

FWS's conclusion that mitigation measures will more than neutralize the mine's most significant threat to a grizzly population that is hanging on by a thread is unsupported and, indeed, ignores agency data indicating that mitigation will be inadequate to offset threats from the mine.

A. FWS Irrationally Determined that Mine Development Will Yield a Net Reduction in Human-Caused Grizzly Bear Mortality

FWS arbitrarily determined that an influx of more than 800 people associated with the Montanore Mine into an area with already unsustainable levels of human-caused grizzly bear mortality will not jeopardize a grizzly population the agency admits is dangerously small and in decline. Indeed, substituting speculation for evidence, FWS concluded that mine development will benefit the struggling Cabinet-Yaak grizzly population because promised mitigation measures will achieve a net reduction in human caused mortality across the ecosystem

notwithstanding new threats from the mine. SOF ¶¶ 89, 97. That determination should be set aside because FWS provided no evidentiary basis for concluding that the mine’s mitigation benefits will more than offset its costs in grizzly bear mortalities.

The majority of grizzly bear deaths in the Cabinet-Yaak are human-caused—whether accidental or malicious—and such killings drive grizzly population dynamics. *Id.* ¶¶ 76-78. Given the precariously small number of grizzlies in the ecosystem, “any mortality is a serious blow to the population,” FWS-EM-5038 (FWS grizzly recovery coordinator), and FWS acknowledged that the killing of a single bear would harm recovery prospects, SOF ¶ 79. Humans already kill about one grizzly bear per year in the Cabinet-Yaak, though that rate spiked to nearly three bears annually from 2002-2012. *Id.* ¶ 78. As FWS admitted, “[t]he existing human-caused mortality rate, given the small grizzly bear population, is not sustainable with or without the Montanore Mine.” FWS-ConsDoc-674.

To this mix the mine will add more than 800 people working, living, and recreating in grizzly habitat—on top of 770 people anticipated from the Rock Creek Mine. SOF ¶ 83. FWS determined that this influx and associated human-caused mortality risks constitute the mine’s “most prominent direct and indirect effects on grizzly bears.” FWS-ConsDoc-648. The threat will be particularly

acute because the influx of people will “occur over a very short time frame once hiring for the mine begins,” giving grizzlies little opportunity to adapt, and will involve individuals with mixed knowledge of and commitment to grizzly conservation. FWS-ConsDoc-650; SOF ¶¶ 84, 86. FWS also acknowledged that poaching tends to “spike” with projects like Montanore that initially attract “transient work forces that work ‘around-the-clock’ schedules.” FWS-ConsDoc-652.

FWS’s determination that mitigation measures will more than neutralize this threat is arbitrary for two reasons. First, the BiOp concedes that “[n]o empirical data is available with which to accurately predict the number of grizzly bear mortalities as a result of the proposed mine over 30 years.” FWS-ConsDoc-662. Nevertheless, without citing any supporting evidence or methodology for its calculation, FWS concluded that the mine will “result in no more than one grizzly bear mortality over the 30-year life of the mine.” FWS-ConsDoc-664. Second, FWS relied on the equally unsupported judgment that mitigation will “prevent the human-caused mortality of more than one female grizzly bear over a 30-year period,” “more than offsetting the loss we anticipate from the project (one grizzly bear).” FWS-ConsDoc-664, 656. While FWS asserted that “the mitigation package includes examples of most of the kinds of measures known to reduce human-caused mortality,” FWS-ConsDoc-682, it cited no data indicating the

number of grizzly killings that planned mitigation reasonably can be expected to prevent, see FWS-ConsDoc-648-64. FWS also failed to explain the basis for its judgment that the bear “saved” will be female, a questionable hypothesis since known human-caused mortality in the ecosystem is “skewed toward females.” FWS-ConsDoc-690.

Under the ESA, FWS may not base its no-jeopardy determination on a guess that the mine’s mitigation benefits conveniently will cancel out its costs respecting grizzly bear mortality. ESA § 7 imposes on agencies a “rigorous duty” to “insure” that proposed actions will not jeopardize listed species, Marsh, 816 F.2d at 1385 (quoting 16 U.S.C. § 1536(a)(2)) (emphasis in original), and even “a tie in the evidence should go to the species,” Rock Creek I, 390 F. Supp. 2d at 1008. Accordingly, FWS “cannot speculate that no jeopardy ... will occur” based on no evidence. Greenpeace Found. v. Mineta, 122 F. Supp. 2d 1123, 1133 (D. Haw. 2000) (citations omitted); see also Rock Creek I, 390 F. Supp. 2d at 1009 (holding FWS arbitrarily dismissed displacement risks to grizzlies after conceding no evidence existed to quantify effects). Where, as here, the agency offers no evidence rationally supporting its conclusion over the alternative, the Court should not “defer[] to a coin flip.” Greater Yellowstone Coal. v. Servheen, 665 F.3d 1015, 1028 (9th Cir. 2011).

B. FWS Ignored Evidence That Planned Mitigation Measures Will Be Inadequate to Offset Mortality Threats From the Mine

Further, FWS failed to consider evidence that planned mitigation measures will be inadequate to offset the mine's substantial mortality threats.

The record reveals that the key mitigation measures FWS relied upon to neutralize grizzly mortality threats already have been implemented in the ecosystem but have not reduced the number of human-caused mortalities. A state wildlife law enforcement officer and grizzly bear specialist already are employed in Libby to address human-caused mortality in the Cabinet Mountains. SOF ¶ 91. Since 2007, the grizzly specialist has implemented the principal conflict-reduction strategies relied upon in the BiOp, including presenting extensive public education programs, providing bear-resistant garbage containers and electric fencing for residences and garbage-transfer stations, and responding to community residents' calls about problem bears. Id.

Yet—even without contemplated mining impacts—the number of human-caused grizzly bear mortalities in the Cabinet-Yaak has not declined as a result of these efforts: From 2001-2006, before deployment of focused conflict-reduction efforts, 11 documented human-caused mortalities occurred in the United States portion of the ecosystem. Id. ¶ 92. From 2007-2012 (the last year of data evaluated in the BiOp)—concurrent with implementation of extensive conflict-reduction work—12 documented human-caused grizzly bear mortalities occurred.

Id. These data come from FWS’s own research reports, see FWS-Lit-13366-67, but are not considered in the BiOp.

FWS could not rationally ignore its own data indicating that deploying key elements of the mine mitigation plan has failed to reduce human-caused mortality in the Cabinet-Yaak even in the absence of the Montanore and Rock Creek Mines. To satisfy the ESA’s “best available science” requirement, FWS cannot “ignore available studies” relevant to its decision. San Luis & Delta-Mendota Water Auth. v. Locke, 776 F.3d 971, 995 (9th Cir. 2014) (citation omitted). Further, FWS “entirely failed to consider an important aspect of the problem” by disregarding its own data related to effectiveness of the very mitigation measures on which its no-jeopardy determination relies. State Farm, 463 U.S. at 43.

This omission is especially serious because FWS’s decision places enormous pressure on the effectiveness of mitigation measures in reducing human-caused grizzly mortality. The challenged no-jeopardy determination depends on those measures to neutralize the mine’s “most prominent direct and indirect” threats to grizzlies. FWS-ConsDoc-648. And the ambitiousness of FWS’s assessment concerning mitigation effectiveness hardly can be overstated: as described—without the Montanore or Rock Creek Mines and 1,500-plus new people associated with those projects—the Cabinet-Yaak grizzly population already suffers an average of one human-caused mortality annually. SOF ¶ 78. Yet FWS concluded

that MMC's mitigation measures will ensure only one grizzly is killed over a thirty-year period due to the Montanore Mine and prevent the killing of more than one female bear that would have occurred in the mine's absence. Id. ¶¶ 88-89. Data revealing key elements of the mitigation plan have failed to reduce the human-caused mortality rate without mines on the landscape critically undermine that conclusion and could not rationally be ignored by FWS. San Luis & Delta-Mendota Water Auth., 776 F.3d at 995.

In this regard, anecdotal evidence that conflict-reduction measures advance grizzly bear conservation is not a substitute for the quantitative evidence FWS ignored. See FWS-ConsDoc-659-70 (providing anecdotal evidence of conflict-reduction effectiveness). This is because FWS's no-jeopardy determination embodies a quantitative assessment that the mine's costs (1 grizzly killed) will be exceeded by its mitigation benefits (more than 1 female grizzly saved). FWS-ConsDoc-656, 664. FWS had no evidentiary basis for that quantitative assessment, SOF ¶¶ 88-89, and general statements about the value of conflict-reduction do not rationally support FWS's conclusion that measures that have been inadequate to reduce human-caused mortality in the Cabinet-Yaak without mines on the landscape can be counted on to ensure that the Montanore project prevents more grizzly bear killings than it causes. See Ariz. Cattle Growers' Ass'n, 606 F.3d at

1163 (court should not defer to agency decision that lacks “substantial basis in fact”) (citation omitted).

As this Court held, facing a “clear possibility that [grizzly] bears are at least not increasing [in the Cabinet-Yaak], contemplating the loss of additional bears related to the mine is not rational.” Rock Creek I, 390 F. Supp. 2d at 1008. FWS’s unsupported guesswork and disregard of evidence bearing on mitigation effectiveness gamble with the fate of an essential, imperiled grizzly bear population and contravene the ESA’s policy of “institutionalized caution.” Id. at 1003 (quoting Tenn. Valley Auth., 437 U.S. at 194). By counting on mitigation measures to offset substantial risks to a grizzly population already facing serious extinction risks without considering its own data regarding those measures’ effectiveness, FWS violated the ESA and its no-jeopardy determination should be set aside.

VI. THE FOREST SERVICE VIOLATED THE ESA BY RELYING ON FWS’S FLAWED BIOLOGICAL OPINIONS

By relying on FWS’s unlawful conclusions, the Forest Service also violated the ESA. Under ESA § 7, the Forest Service has an independent obligation to ensure that actions it authorizes, such as the Montanore Mine, will not jeopardize listed species or destroy or adversely modify their critical habitat. 16 U.S.C. § 1536(a)(2). “[A]n agency cannot meet its section 7 obligations by relying on a Biological Opinion that is legally flawed or by failing to discuss information that

would undercut the opinion’s conclusions.” Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt., 698 F.3d 1101, 1127-28 (9th Cir. 2012) (citing Wild Fish Conservancy, 628 F.3d at 532).

In its record of decision approving the Montanore Mine, the Forest Service violated the ESA by relying on FWS’s unlawful Aquatic and Terrestrial BiOps to conclude that the mine will not jeopardize bull trout or grizzly bears or destroy or adversely modify bull trout critical habitat. FS-10579-80. Though the Forest Service stated its ESA determinations also rest on a “review of data presented in the ... Final EIS” for the project, the agency failed to identify the relevant data or provide any independent jeopardy or critical habitat analysis. FS-10580. Beyond that passing reference to the EIS, the Forest Service’s ESA analysis consists of a summary of the formal consultation process with FWS and FWS’s findings in the challenged BiOps. FS-10579-80. Because those BiOps are unlawful, the Forest Service’s reliance on them in authorizing the mine violates ESA § 7. Ctr. for Biological Diversity, 698 F.3d at 1127-28.

CONCLUSION

For the foregoing reasons, plaintiffs respectfully request that this Court declare unlawful and set aside FWS’s Aquatic and Terrestrial BiOps and the Forest Service’s record of decision for the Montanore Mine.

Respectfully submitted this 23rd day of September, 2016,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was today served via the Court's CM/ECF system on all counsel of record.

/s/Katherine K. O'Brien

CERTIFICATE OF COMPLIANCE

Pursuant to Local Rule 7.1(d)(2), I hereby certify that the foregoing brief contains 9,994 words, as determined by the word count function of Microsoft Word. The Court has granted leave to file a brief in excess of the Court's 6,500 word limit (ECF No. 32).

/s/Katherine K. O'Brien